

In the United States, it is estimated that 1 in 6 men will be diagnosed with cancer of the prostate, and 1 in 39 women will be diagnosed with cancer of the corpus and uterus, NOS, during their lifetime based on SEER Incidence rates from 2005-2007. Whether the medical physicist is employed in a stand-alone, private clinic or in a large, multi-disciplinary academic center, pelvic irradiation is one of the most common therapies offered.

The intent of this talk is to provide material to further the medical physicist's understanding of the planning, QA, and role of imaging of localization for pelvis treatments. Target and avoidance structures and different treatment plans for external beam modalities will be presented. Discussion of quality assurance will include the patient-specific treatment plan as well as patient-specific treatment delivery. A few treatment machine and imaging specific quality assurance tests will be highlighted. Lastly, imaging techniques for patient setup, localization and re-planning will be discussed.

Learning Objectives:

1. Treatment plans for male and female pelvic sites
2. General and patient-specific quality assurance for pelvis treatments
3. Use of imaging for pelvic localization